The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: (

Source:

Date Processed by STIC:

09/674,237C

ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 05/25/2005
PATENT APPLICATION: US/09/674,237C TIME: 13:53:57

Input Set : A:\3477.89.ST25.txt

Output Set: N:\CRF4\05252005\1674237C.raw

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3 <110> APPLICANT: Egan, Sean E.
 4
         Wang, Wei
 5
         Sengar, Ameet
                                                                  (p5,6)
 7 <120> TITLE OF INVENTION: ESE GENES AND PROTEINS
 9 <130> FILE REFERENCE: 3477-89
11 <140> CURRENT APPLICATION NUMBER: US 09/674,237C
12 <141> CURRENT FILING DATE: 2001-07-24
14 <150> PRIOR APPLICATION NUMBER: PCT/CA99/00375
15 <151> PRIOR FILING DATE: 1999-04-27
17 <150> PRIOR APPLICATION NUMBER: US 60/118,739
18 <151> PRIOR FILING DATE: 1999-02-05
20 <150> PRIOR APPLICATION NUMBER: CA 2230201
21 <151> PRIOR FILING DATE: 1998-04-27
23 <160> NUMBER OF SEQ ID NOS: 37
25 <170> SOFTWARE: PatentIn version 3.3
27 <210> SEQ ID NO: 1
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37 cgggcgggga tggtgtgcgc ggctgcggac tcggcgttcc tcgcgcggcg tgcgggctgc
                                                                         180
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                                                                         240
41 ggtgaacgta atagaaccat ggctcagttt cccacacctt tcggtggtag cctggatgtc
                                                                         300
43 tgggccataa ctgtggagga aagggccaag catgaccagc aqttccttag cctgaagccq
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                                                                         420
47 cagcctgtct tagcacaaat atgggcgcta gcggacatga ataacgatgg aaggatggat
                                                                        , 480
49 caagtggaat tttccatagc catgaagctt atcaaactga agctacaagg atatcagctc
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53 tttggtatag gagggattgc tagcatgcca ccactcacag ctgttgctcc tgtgccaatg
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55 ggctccattc cagttgttgg aatgtctcca cccttagtat cttctgtccc tccagcagca
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57 gtgcctcccc tggctaacgg ggctcctccc gtcatacagc ctctgcctgc gtttgcgcat
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59 cctgcagcca catggccaaa gagttcttcc ttcagcagat ctggtccagg gtcacaatta
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61 aacactaagt tacagaaggc acaatcattc gatgtcgcca gcgcccctcc agcagcagaa
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63 tgggctgtgc ctcagtcatc aaggctgaaa tacaggcagt tattcaacag ccacgacaaa
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65 actatgagtg gacacttaac aggtccccag gcaagaacta ttctcatgca atcaagttta
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67 ccccaggctc agctggcttc aatatggaat ctttctgaca ttgatcaaga tggaaaactc
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1380

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83 cagcgggagc						1560
85 gccgcaaaac						1620
87 gaactcctga	atcagaggaa	caaggagcag	gagggcaccg	tggtcctgaa -	ggcaaggagg	1680
89 aagactctgg	agtttgagtt	agaagctctg	aatgacaaaa	agcatcagct -	agaaggaaaa	1740
91 cttcaggata	tcaggtgtcg	actggcaacc	cagaggcaag	aaattgagag	cacgaacaag	1800
93 tctagagagc	taagaattgc	tgaaatcacc	cacttacagc	agcagttgca ·	ggaatctcag	1860
95 caaatgcttg	gaagacttat	tccagagaaa	cagatactca	gtgaccagtt -	aaaacaagtc	1920
97 cagcagaaca						1980
99 gagctggccc						2040
101 aagctgcagg						2100
103 aaacagcaac						2160
105 gagaggaaga						2220
107 agggacaagc						2280
109 cacgaggagg						2340
111 gccaagccgg						2400
						2460
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119 ccaggatggc						2640
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123 gcccctgccc			•			2760
125 gagccctcca						2820
127 aacgagaagc						2880
129 cctagtgctg						2940
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133 tatccctgga	gagccaaaaa	agacaaccac	ttaaatttta	acaaaagtga	cgtcatcacc	3060
135 gttctggaac	: agcaagacat	gtggtggttt	ggagaagttc	aaggtcagaa	gggttggttc	3120
137 cccaagtctt	acgtgaaact	catttcaggg	cccgtaagga	aatccacaag	catcgatact	3180
139 ggccctactg	, aaagtcctgc	tagtctaaag	agagtggctt	ccccggccgc	caagccagcc	3240
141 attcccggag	, aagagtttat	tgccatgtac	acatacgaga	gttctgagca	aggagattta	3300
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145 acggtgggcg	, acaagtccgg	agtcttccct	tctaactatg	tgaggcttaa	agattcagag	3420
147 ggctctggaa	ctgctgggaa	aacagggagt	ttaggaaaaa	aacctgaaat	tgcccaggtt	3480
149 attgcttcct						3540
151 ctgatccgga						3600
153 aagcgccaga						⁷ 3660
155 aaaatcaccc						3720
157 gggatgtacg						3780
159 atcaacgtcc						3840
161 gggctcttcc						3900
163 atcatatgtt						3960
165 tatcactgcc						4020
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171 tgcacagggt						4200
						4200
173 ttcacacggg						
175 ataaaaatct	caatcaatta	cttctttgcc	tattttggtt	ttacaaaaac	acccactatc	4320

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Output Set: N:\CRF4\05252005\1674237C.raw

179 181 183 185 187 189 191 193 195 197 199 201 204	ttg ccc agc tac acc tca atc gga tta atag t21	ctgt tgcc catc ctca catct atca atatt tggc atat 30> S	acc gta cta tgt tct ggc gta ccc gct tag EQ I	tttggageggageggagegggageggggggggggggggg	ccgtiacaga agga agga catto ccgto aagto agga agga agga agga agga agga	tt g ag t ag t ag t c ac t ac t ac t ac t g g t g g t g g t g t g g t g g t g g t g g t g g t g g t g g t g g t g g t g g t g t g g t g g t g g t g g t g g t g g t g g t g g t g g t g g t g t g g t g g t g g t g g t g g t g g t g g t g g t g g t g g t g t g t g g t g g t g g t g g t g g t g g t g g t g g t g g t g g t g t g g t g g t g g t g g t g g t g g t g g t g g t g g t g g t g t g g t g g t g g t g g t g g t g g t g g t g g t g g t g g t g	tcca agat agct agct caga ccat agtc cttc tgtg	gtgt gggt ttgt cttt cttta aaac tctga ttga t	t cc g ta c tc g ca c ta g ct t ta c aac t aac	caac cctg catg cagt cagtt cgtaa gaaa gactg ttgt	caca tttt catc gcta gacc gacgc aagt gaat tggg gctg	ttg gaa acg acc ttg ccg caa tta gta ggt tag	tgta aatg tgta ccac tagc tgtt ctgc ttcc taga tgct	gtt tgt cct cac cttg cca agt agt	tggggatggggggggggggggggggggggggggggggg	gagage getgtt agactg egcatg tacagt ggaage tatttt gttacg ttttat etgcaa aatatg	4380 4440 4500 4560 4620 4680 4740 4860 4920 4980 5040 5084
206	<21	2> T	YPE:	DNA													
				ISM:	Mus	mus	culu	s									
		0> F															
				KEY:													
				ION:													
				INF		rion	: Moi	use l	Esel								
			-	NCE:													
															tgg Trp		48
218		ALG	GIII	1116	5	1111	FIO	FIIE	GIA	10	ser	ьeu	Asp	vaı	11p	Ата	
		act	ata	gag	-	agg	acc	aaσ	cat		cag	cag	ttc	ctt	agc	cta	96
221	Ile	Thr	Val	Glu	Glu	Arg	Ala	Lys	His	Asp	Gln	Gln	Phe	Leu	Ser	Leu	50
222				20		,		-2	25	- 1				30			
															ttt		144
	Lys	Pro		Ala	Gly	Phe	Ile	Thr	Gly	Asp	Gln	Ala	Arg	Asn	Phe	Phe	
226			35					40					45				
228	ttc	caa	tct	ggg	tta -	cct	cag	cct	gtc	tta	gca	caa	ata	tgg	gcg	cta	192
229	Phe	50	Ser	Gly	Leu	Pro		Pro	Val	Leu	Ala		Ile	Trp	Ala	Leu	
	aca		2+4	2 2 t	226	~~+	55	~~~	~ * ~	~~+		60 ~ + ~	~		.		240
233	Ala	Asp	Met	aat Asn	Aac Aan	yat Asn	Clv	Arg	Mot	yaı Nen	Caa	gra Val	Glu	Dho	tcc Ser	ata	240
234		1100	1100	11011	71511	70	Ory	Arg	nec	изБ	75	Vai	Giu	rne	261	80	
		atg	aag	ctt	atc		cta	aaσ	cta	caa	_	tat	cag	ata	ссс		288
237	Ála	Met	Lys	Leu	Ile	Lys	Leu	Lys	Leu	Gln	Glv	Tyr	Gln	Leu	Pro	Ser	. 200
238			_		85	-		-		90	-	-			95		
															agt		336
	Thr	Leu	Pro	Pro	Val	Met	Lys	Gln	Gln	${\tt Pro}$	Val	Ala	Ile	Ser	Ser	Ala	
242				100					105					110			
244	cca	gca	ttt	ggt	ata	gga	ggg	att	gct	agc	atg	cca	cca	ctc	aca	gct	384
	Pro	Ala		GLY	Ile	GLy	Gly		Ala	Ser	Met	Pro		Leu	Thr	Ala	
246	~++	~c+	115	~+~		-+-	a. a	120	_ 4- 4-		_4- 4-	-4-4-	125				400
240	yit Val	yct Mla	Dro	grg	CCa Dro	atg	ggc	CCC	att	CCa Dra	gtt	gtt	gga	atg	tct	cca	432
250	۷ат	130	FIO	val	FIO	met	135	ser	тте	PLO	val	vai 140	σтλ	мет	Ser	Pro	
230		100					133					140					



RAW SEQUENCE LISTING PATENT APPLICATION: US/09/674,237C -----DATE: 05/25/2005 TIME: 13:53:57

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Output Set: N:\CRF4\05252005\1674237C. \(\pm \)aw

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253	Pro		-			Val			_	_	Val			Leu	-	Asn	
	145					150					155					160	500
														cat			528
	GLY	Ala	Pro	Pro		He	Gln	Pro	Leu		Ala	Phe	Ala	His		Ala	
258					165					170					175		
														cca			576
	Ala	Thr	Trp		Lys	Ser	Ser	Ser		Ser	Arg	Ser	Gly	Pro	Gly	Ser	
262				180					185					190			
														gtc			624
	Gln	Leu		Thr	Lys	Leu	Gln		Ala	Gln	Ser	Phe		Val	Ala	Ser	
266			195					200					205				
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269	Ala	Pro	Pro	Ala	Ala	Glu	Trp	Ala	Val	Pro	Gln	Ser	Ser	Arg	Leu	Lys	
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273	Tyr	Arg	Gln	Leu	Phe	Asn	Ser	His	Asp	Lys	Thr	Met	Ser	Gly	His	Leu	
274	225					230				ı	235					240	
276	aca	ggt	ccc	cag	gca	aġa	act	att	ctc	atg	caa	tca	agt	tta	ccc	cag	768
277	Thr	Gly	Pro	Gln	Ala	Arg	Thr	Ile	Leu	Met	Gln	Ser	Ser	Leu	Pro	Gln	
278					245					250					255		
280	gct	cag	ctg	gct	tca	ata	tgg	aat	ctt	tct	gac	att	gat	caa	gat	gga	816
281	Ala	Gln	Leu	Ala	Ser	Ile	Trp	Asn	Leu	Ser	Asp	Ile	Asp	Gln	Asp	Gly	
282				260			_		265		_		_	270	-	_	•
284	aaa	ctc	act	gca	gaa	gaa	ttt	atc	cta	gct	atg	cac	cta	att	gat	gtt	864
				_	-	_				-	_			Ile	_	_	
286	-		275					280					285		-		
288	qcc	atq	tct	ggt	caq	cca	ctq	ccq	ccc	qtc	ctq	cct	cca	gaa	tac	atc	912
	_	_			_		_	_		-	_			Ğlu			
290		290		-			295					300			-	ē	
292	cct	cct	tcc	ttc	aga	aga	att	cac	tcc	aac	agt	aaa	atq	tcc	atc	ata	960
					_	_	_	_			_		_	Ser	_		
294					,	310		5		2	315	-			-	320	
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298					325			5		330					335		
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302				340			-,-		345					350		-70	
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306	L y S	11119	355	11011		Olu	1119	360	501	Vul	OIU	Dea	365	 5	**** 9	1119	
	caa	aca		tta	asa	CaG	cac		222	asa	caa	asa		ttg	act	Car	1152
														Leu			1152
310	GIII	370	ьеu	neu	Giu	GIII	375	ALG	пуз	Giu	GIII	380	ALG	neu	AIA	GIII	
	at a		~~~	~~~	~~~	a		~~~	222	~~~	~~~		~~~	~~~	~~~	G26	1200
														cag			1200
		GIU	Arg	WIG	GIU		GIU	Arg	гуз	GIU	_	GIU	Arg	Gln	GIU		
314		~	~		~-~	390		_4_			395	_+-				400	1040
316	gag	gcc	aag	cgg	cag	ctg	gag	ctg	gag	aag	cag	ctg	gag	aag	cag	cgg	1248

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																	-
317 318	Glu	Ala	Lys	Arg	Gln 405	Leu	Glu	Leu	Glu	Lys 410	Gln	Leu	Glu	Lys	Gln 415	Arg	
320	gag	cta	σασ	caa	cag	cga	gag	gag	gag	agg	agg	aaσ	σασ	atc	σασ	agg	1296
	Glu																,
	Giu	пец	Giu	420	GIII	Arg	GIU	GIU	425	hrg	hry	دلالا	Gra	430	GIU	nrg	
322																4	1244
	cgc																1344
325	Arg	Glu	Ala	Ala	Lys	Arg	Glu	Leu	Glu	Arg	Gln	Arg	Gln	Leu	Glu	Trp	
326			435					440					445				
328	gaa	cgg	aac	cgg	aga	cag	gaa	ctc	ctq	aat	cag	agg	aac	aag	gag	cag	1392
329	Glu	Ara	Asn	Ara	Ara	Gln	Ğlu	Leu	Leu	Asn	Gln	Ara	Asn	Lvs	Glu	Gln	
330		450		-			455					460		-			
	gag		acc	ata	atc	cta		aca	agg	agg	aan	act	cta	gag	+++	gag	1440
	Glu																
	465	Gry	1111	Vai	Val	470	пуз	ліа	Arg	ALG	475	IIII	nea	GIU	rne	480	
				- 4											_ 4. 4.		1400
	tta -																1488
	Leu	Glu	Ala	Leu		Asp	Lys	Lys	Hıs		Leu	GIu	GTA	Lys		GIn	
338					485					490					495		
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341	Asp	Ile	Arg	Cys	Arg	Leu	Ala	Thr	Gln	Arg	Gln	Glu	Ile	Glu	Ser	Thr	
342				500					505					510			
344	aac	aaq	tct	aga	qaq	cta	aga	att	qct	gaa	atc	acc	cac	tta	caq	cag	1584
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	Gln	-	_	_		-		-			_						1002
350	GIII	530	GIII	GIU	261	GIII	535	Mec	пец	Gry	ALG	540	116	110	Gru	БУЗ	
																	1600
	cag																1680
	Gln	тте	Leu	ser	Asp		Leu	ьys	GIN	vaı		GIN	Asn	ser	ьeu		
	545					550					555					560	1500
	aga																1728
	Arg	Asp	Ser	Leu		Thr	Leu	Lys	Arg		Leu	Glu	Ala	Lys		Leu	
358					565					570					575		
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361	Ala	Arg	Gln	Gln	Leu	Arg	Glu	Gln	Leu	Asp	Glu	Val	Glu	Arg	Glu	Thr	
362				580					585					590			
364	agg	tca	aaσ	cta	caq	gag	att	gat	att	ttc	aac	aac	caq	cta	aaq	gaa	1824
	Arg																
366	9		595					600					605		-1-		1
	ctg	2012		at a	cat	200	222		C22	ctc	cac	220		200	tec	cta	1872
	Leu																10,2
	ьец		GIU	тте	птѕ	Ser		GIII	GIII	ren	GIII		GIII	Arg	Ser	ьеи	
370		610					615					620					1000
	gag																1920
	Glu	Ala	Ala	Arg	Leu		Gln	Lys	Glu	Gln		Arg	Lys	Ser	Leu		
	625					630					635					640	
376	tta	gag	aag	caa	aag	gaa	gac	gct	cag	aga	cga	gtt	cag	gaa	agg	gac	1968
377	Leu	Glu	Lys	Gln	Lys	Glu	Asp	Ala	Gln	Arg	Arg	Val	Gln	Glu	Arg	Asp	
378			•		645		-			650	_				655		
380	aag	caa	taa	cta	gag	cat	gta	caq	caq	gag	gag	caq	cca	cqc	ССС	cqq	2016
	Lys																
	-		_			_			_					_		_	

RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/09/674,237C

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:18; N Pos. 102,103

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:28,29,30,31,32,33,36,37

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L:2218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:60